

What Is Claimed Is:

1. Apparatus for reducing mitral regurgitation,
the apparatus comprising:

5 a bendable elongated body adapted to be inserted
 into the coronary sinus of a patient in the vicinity
 of the posterior leaflet of the mitral valve, the
 elongated body being adjustable between a first
 configuration adapted to be delivered into the
 coronary sinus and a second configuration adapted to
 exert a force onto the posterior annulus, the body
 comprising:

10 a flexible spine having a proximal end and a
 distal end; and

15 a flexible wire mounted on said spine and having
 a distal end fixed to said spine proximate to the
 distal end of said spine, and having a proximal
 portion extending from the proximal end of said spine;

20 whereby axial movement of said wire causes a
 change in said spine from the first configuration to
 the second configuration to exert the force on the

posterior annulus and thereby reduce mitral
regurgitation.

5 2. The apparatus in accordance with claim 1,
wherein the axial movement of said wire in a proximal
direction causes said spine reconfiguration to a
lesser curve having a greater radius of curvature.

10 3. The apparatus in accordance with claim 1
wherein the axial movement of said wire in a distal
direction causes said spine to reconfigure to a more
pronounced curve having a lesser radius of curvature.

15 4. The apparatus in accordance with claim 1
wherein the first configuration is curved and the
second configuration is a selected one of (i) more
curved and (ii) less curved.

20 5. The apparatus in accordance with claim 4
wherein the less curved configuration is substantially
straight.

6. The apparatus in accordance with claim 1
wherein said spine is provided with barbs thereon.

5 7. The apparatus in accordance with claim 1
wherein said spine comprises portions each defining a
channel for said wire.

10 8. The apparatus in accordance with claim 1
wherein loops are fixed to said spine and said wire
extends through said loops and is movable
therethrough.

15 9. The apparatus in accordance with claim 8
wherein the loops are defined by staples.

10. Apparatus for reducing mitral regurgitation,
the apparatus comprising:

20 a bendable elongated body adapted to be inserted
into the coronary sinus of a patient in the vicinity
of the posterior leaflet of the mitral valve, the

elongated body being adjustable between a first configuration adapted to be delivered into the coronary sinus and a second configuration adapted to exert a force onto the posterior annulus, the body comprising:

5 a flexible spine having a proximal end and a distal end; and

10 a flexible wire mounted on said spine and having a distal end fixed to said spine proximate to the distal end of said spine, and having a proximal portion extending from the proximal end of said spine;

15 whereby pulling of said wire causes straightening of said spine to move said spine from the first configuration to the second configuration to exert the force on the posterior annulus and thereby reduce mitral regurgitation.

20 11. The apparatus in accordance with claim 10 wherein loops are mounted on said spine and said wire is movable therein.

12. The apparatus in accordance with claim 11
wherein said loops are staples.

13. A method for reducing mitral regurgitation,
the method comprising the steps of:

positioning a prosthesis in a coronary sinus, the
prosthesis comprising:

a bendable elongated body adapted to be inserted
into the coronary sinus of a patient in the vicinity
of the posterior leaflet of the mitral valve, the
elongated body being adjustable between a first
configuration adapted to be delivered into the
coronary sinus and a second configuration adapted to
exert a force onto the posterior annulus, the body
comprising:

a flexible spine having a proximal end and a
distal end; and

a flexible wire mounted on said spine and having
a distal end fixed to said spine proximate to the
distal end of said spine, and having a proximal

portion extending from the proximal end of said spine;
and

moving the wire axially to cause a change in the
spine from the first configuration to the second
configuration to exert the force on the posterior
annulus and thereby reduce mitral regurgitation.

14. A method for reducing mitral regurgitation,
the method comprising the steps of:

positioning a prosthesis in a coronary sinus, the
prosthesis comprising:

a bendable elongated body adapted to be inserted
into the coronary sinus of a patient in the vicinity
of the posterior leaflet of the mitral valve, the
elongated body being adjustable between a first
configuration adapted to be delivered into the
coronary sinus and a second configuration adapted to
exert a force onto the posterior annulus, the body
comprising:

a flexible spine having a proximal end and a
distal end; and

a flexible wire mounted on said spine and having
a distal end fixed to said spine proximate to the
distal end of said spine, and having a proximal
portion extending from the proximal end of said spine;
5 and

pulling the wire to straighten the spine to move
the spine from the first configuration to the second
configuration to exert the force on the posterior
annulus and thereby reduce mitral regurgitation.

10 15. A method for reducing mitral regurgitation,
the method comprising scarring the mitral valve
annulus to cause contraction thereof.

20 16. The method in accordance with claim 15
wherein the scarring is accomplished by injecting a
scarring medium into the mitral valve annulus.

17. The method in accordance with claim 16
25 wherein the medium comprises energy selected from a

group of energies consisting of chemical, thermal,
cryogenic, laser and radio frequency.

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